

Application No. 09/490,882
Amendment "B" dated September 17, 2004
Reply to Office Action mailed July 8, 2004

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of the claims:

Listing of Claims:

1. (Previously Presented) An interconnection cable system for interconnecting a first electronic device to a second electronic device, both electronic devices utilizing audio and video signals, the interconnection system comprising:

a plurality of electrical conductors for interconnecting the first electronic device and the second electronic device, each of the plurality of electrical conductors having a first end and a second end;

one or more male audio connectors, each being attached to the first end of one of the electrical conductors of the plurality of electrical conductors;

a mini plug is attached to the second end of the plurality of electrical conductors;
and

a male video connector attached to the first end of each of a subset of the plurality of electrical conductors, the male video connector being selectively adaptable for use with either a composite signal format or an S-video signal format such that the interconnection system is selectively usable with either the composite signal format or the S-video signal format, wherein the male video connector comprises a male S-video connector and an adapter having a female S-video end that can be selectively coupled with the male S-video connector and a male RCA end opposite the female S-video end for supporting the composite signal format, wherein the video connector supports the composite video signal format when the adapter is coupled with the male S-video connector.

2. (Previously Presented) An interconnection cable system as recited in claim 1, wherein the video connector comprises a male S-video connector for use with the S-video signal format.

3. (Cancelled).

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4. (Previously Presented) An interconnection cable system as recited in claim 1, wherein the one or more male audio connectors comprises a left audio connector and a right audio connector that are capable of transmitting audio signals between the first electronic device and the second electronic device when the interconnection system is used with the composite video format..
5. (Previously Presented) An interconnection cable system as recited in claim 4, wherein the male video connector comprises an S-video connector including an S-video audio connector, the S-video audio connector, rather than the left audio connector and the right audio connector, being used to transmit audio signals when the interconnection system is used with the S-video format.
6. (Currently Amended) An interconnection cable system as recited in claim 1, ~~further comprising a mini plug attached to both the second end of said one of the plurality of electrical conductors and the second end of each of said subset of the plurality of electrical conductors, wherein the mini plug having includes a plurality of contact points.~~
7. (Previously Presented) An interconnection cable system as recited in claim 6, wherein the plurality of contact points include a first contact point for transmitting left audio signals, a second contact point for transmitting right audio signals, a third contact point for transmitting video chroma signals and a fourth contact point for transmitting video luma signals.
8. (Previously Presented) An interconnection cable system as recited in claim 7, wherein the plurality of contact points further includes a fifth contact point for ground.
9. (Previously Presented) An interconnection cable system as recited in claim 6, wherein the video connector comprises a male S-video connector for use with the S-video signal format.
10. (Cancelled).

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11. (Original) An interconnection system for interconnecting a first electronic device to a second electronic device, both electronic devices utilizing audio and video signals, the interconnection system comprising:

a mini plug at a first end of the interconnection system and having a plurality of contact points, wherein the mini plug can be connected to the first electronic device; and

a plurality of electrical conductors for interconnecting the first electronic device and the second electronic device, each of the plurality of electrical conductors having a first end and a second end, wherein the first end of each of the plurality of electrical conductors is connected to one of the contact points of the mini plug; and

means for selectively adapting the interconnection system for use with either a composite video signal format or an S-video signal format, the means for selectively adapting the interconnection system being connected to the second end of at least some of the plurality of electrical conductors.

12. (Original) An interconnection system as recited in claim 11, wherein the plurality of contact points include a first contact point for transmitting left audio signals, a second contact point for transmitting right audio signals, a third contact point for transmitting video chroma signals and a fourth contact point for transmitting video luma signals.

13. (Original) An interconnection system as recited in claim 12, wherein the plurality of contact points further includes a fifth contact point for ground.

14. (Original) An interconnection system as recited in claim 11, wherein the means for selectively adapting the interconnection system comprises:

one or more audio connectors, each being attached to the second end of one of the electrical conductors of the plurality of electrical conductors; and

a video connector attached to the second end of each of a subset of the plurality of electrical conductors, the video connector being selectively adaptable for use with either a composite signal format or an S-video signal format such that the interconnection system is selectively usable with either the composite signal format or the S-video signal format.

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15. (Original) An interconnection system as recited in claim 11, further comprising a mini plug receptacle included in the first electronic device, the mini plug receptacle enabling the mini plug end to be connected to the first electronic device.

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16. (Original) In a system that includes at least a first electronic device and a second electronic device, a method for communicating signals between the first electronic device and the second electronic device using either a composite signal format or an S-video signal format, the method comprising the steps of:

connecting the first electronic device with the second electronic device with an interconnection system that is selectively adaptable to transmit signals using either a composite video signal or an S-video signals, the interconnection system, when connecting the first electronic device with the second electronic device, being adapted to transmit the signal using a particular signal format selected from the composite video signal format and the S-video signal format;

at the first electronic device, determining whether the particular signal format is the composite signal format or the S-video signal format; and

based on the determination made in the determining step, communicating between the first electronic device and the second electronic device using the particular signal format.

17. (Original) A method as recited in claim 16, wherein the interconnection system comprises:

a plurality of electrical conductors;

a mini plug for connecting the plurality of electrical conductors to the first electronic device; and

at least one an audio connector and at least one video connector for connecting the plurality of electrical conductors to the second electronic device, wherein the second electronic device utilizes one of a composite signal format and an S-video signal format.

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18. (Original) A method as recited in claim 17, wherein at least one video connector comprises a male S-video connector having a plurality of pins, and wherein the interconnection system further includes an adapter for use when the particular signal format is the composite signal format, the adapter having a female S-video end for mating with the male S-video connector and a male RCA end opposite the female S-video end for connecting the plurality of electrical conductors to the second electronic device.
19. (Original) A method as recited in claim 18, wherein two of the plurality of pins of the male S-video connector are shorted when the male S-video connector is mated with the female S-video end.
20. (Original) A method as recited in claim 18, wherein the step of determining comprises the step of measuring the impedance associated with selected electrical connectors of the plurality of electrical connectors.
21. (Original) A method as recited in claim 20, wherein the step of measuring the impedance is conducted using a differential amplifier.
22. (Original) A method as recited in claim 20, wherein the step of measuring the impedance is conducted using an impedance sensor.
23. (Original) A method as recited in claim 17, further comprising the step of recognizing, by the first electronic device, that the mini plug has been inserted into a receptacle at the first electronic device, the step of recognizing further comprising the step of sensing a physical displacement of a component of the receptacle as the mini plug is inserted into the receptacle.
24. (Original) A method as recited in claim 17, further comprising the step of determining, at the first electronic device, whether the signal is transmitted into or out of the second electronic device.

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25. (Original) A system for connecting a first electronic device to a second electronic device and for transmitting signals between the first electronic device and the second electronic device, the system comprising:

an interconnection system including:

a mini plug at a first end of the interconnection system and having a plurality of contact points, wherein the mini plug can be connected to the first electronic device; and

a plurality of electrical conductors for interconnecting the first electronic device and the second electronic device, each of the plurality of electrical conductors having a first end and a second end, wherein the first end of each of the plurality of electrical conductors is connected to one of the contact points of the mini plug; and

means for selectively adapting the interconnection system for use with either a composite video signal format or an S-video signal format, the means for selectively adapting the interconnection system being connected to the second end of at least some of the plurality of electrical conductors; and

a receptacle that is included in the first electronic device and can couple with the mini plug.

26. (Original) A system as recited in claim 25, wherein when the receptacle is coupled with the mini plug, each of the plurality of contact points of the mini plug being in electrical contact with one of a plurality of contact points of the socket.

27. (Original) A system as recited in claim 26, wherein the receptacle includes another contact point, in addition to the plurality of contact points of the receptacle, the additional contact point being capable of ground sensing.

28. (Original) A system as recited in claim 25, wherein one of the plurality of contact points of the mini plug is for video chroma and another of the plurality of contact points of the mini plug is for video luma.

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29. (Original) In a home entertainment system that includes a plurality of electronic devices and utilizes audio and video signals, a method for transmitting either composite or S-video signals through an interconnection system, the method comprising the steps of:

coupling a mini plug positioned at a first end of the interconnection system to a first electronic device so as to enable the transmission of audio and video signals between the interconnection system and the first electronic device; and

coupling a connector positioned at a second, opposite end of the interconnection system to a second consumer electronic device so as to enable the transmission of the audio and video signals between the interconnection system and the second electronic device, wherein the connector is selectively adaptable to be used to transmit the audio and video signals in either a composite signal format or an S-video signal format.

30. (Original) A method as recited in claim 29, wherein the connector includes an S-video connector when the audio and video signals are to be transmitted between the interconnection system and the second electronic device in the S-video signal format.

31. (Original) A method as recited in claim 29, wherein the connector includes an S-video connector having a plurality of pins coupled with an adapter when the audio and video signals are to be transmitted in the composite signal format, the adapter comprising:

an RCA end that mates with the second consumer electronic device; and

an S-video end that mates with the S-video connector, wherein two of the plurality of pins of the S-video connector are shorted when the S-video end is mated with the S-video connector.